David Hauck: In an old house like this, probably the biggest energy use is heating and cooling. And we live in a particularly difficult climate in Maryland.

We have cold winters, and we have hot and humid summers. So, anything that we can do to slow down the air leaking into the house, leaking out of the house, uh, will result in energy savings during the winter on our heating bill and in the summer on our cooling bill. This is an inflatable bag that I just put in, uh, the top of the fireplace to block the damper and make sure that the air in the house doesn't go up the chimney. Uh, you just blow it up with this, uh, tube. It has a nice leg here to hold it up tight against it.

Obviously, when you have a fire, you just let the air out and pull -- pull the bag out, and you wait a day for the fireplace to cool down before you put the bag back up in there. So, now only does it block the air movement, but also because it's a couple inches thick of -- of dead air, it's a nice insulate -- uh, insulating, uh, bag as well for your -- for your chimney. In an old house, a -- a big source of air leaks are your windows. And an easy way to fix is that by buying rope caulk, uh, which you can get at just about any hardware store.

It's cheap, it's easy to use. And you just push it in wherever the window meets the frame. This does a great job of blocking those air leaks, saving you energy, and saving you money during the winter. The other nice thing about rope caulk is when spring comes, and you want to open your windows and get those spring breezes, it pulls out very easily, and you've got your window back, and you've got the natural cooling, which also saves you energy.

But once I've blocked a lot of the air leaks in the house, then you start looking at, you know, what temperature do you keep your house at during the winter and during the summer . During the winter, turn down the heat when there's no one in the house. You don't have to keep the house warm when no one's there. Uh, and you turn the heat back up when -- when people come home. Uh, but you don't always remember this. I know I never remember it. You leave the house in a hurry to go off to work, and you're not going to turn back and say, I forgot to turn down the thermostat.

You just -- you just live with that. A programmable thermostat, uh, makes up for all the times that you forget to turn down the thermostat when you leave in the morning. And the nice thing about a programmable thermostat is it turns the heat back up just before you get home. Something you can't do on your own.

Most people think of ceiling fans in the summer. But you can always use them during the winter. Think about it. All of the hot hair that you've paid to heat has risen and is just sitting up against the ceiling. The way to do this is to make sure your fan's turned off, and then there's a little switch on the side of the fan that you just turn, and this makes the blades move in the opposite direction from the summer. And what it does is just bring the hot hair from the ceiling and just brings it right down to the floor, warming up the whole room rather than warming up your ceiling alone.

Another fan is a whole house fan. Uh, where you want to put a whole house fan is up at the highest point in -- in your house. We're on the second floor of the house in the -- in the hallway, and underneath this insulating panel is the whole house fan. Which we use during the summer to pull in the cooler air, evening air, uh, into the house. And that means we don't have to use the air conditioner as much.

So, when it comes time to use the whole house fan, we just pull this off of the Velcro strips, and, uh, the fan's -- uh, you can just flick the switch, and the fan turns on. Just turn this on, and it just begins to pull the air in through all of the windows and cool down the house very quickly.